

CLAIMS

What is claimed is:

1. In a browser, a method for transferring information between logic entities in browser  
5 pages, the method comprising the steps of:  
     defining a data element having a value for use by a first application logic entity in  
     a first browser page;  
     generating a browser page identifier for a second browser page, the browser page  
     identifier including the value for the data element;  
10      invoking access to a second browser page using the browser page identifier, the  
     second browser page including a second application logic entity; and  
     retrieving the value of the data element from the browser page identifier for use  
     by the second application logic entity.
- 15 2. The method of claim 1 wherein the step of defining a data element includes the steps  
     of:  
     declaring a data element for use by a first application logic entity; and  
     providing a value for the data element.
- 20 3. The method of claim 2, wherein the step of providing a value for the data element  
     comprises the step of:  
     retrieving the value for the data element from a browser page identifier  
     identifying the first browser page.
- 25 4. The method of claim 3 wherein the step of retrieving a value of the data element from  
     a browser page identifier identifying the first browser page includes the steps of:  
     parsing the browser page identifier to retrieve a value for a data element from the  
     browser page identifier;  
     assigning the value to the data element that corresponds to the value parsed from  
30      the browser page identifier; and

repeating the steps of parsing and assigning for each value contained in the browser page identifier such that all data elements containing a value within the browser page identifier receive an assignment of their respective value parsed from the browser page identifier.

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5. The method of claim 1 wherein the step of generating a browser page identifier includes the steps of:

extracting a value for each data element shared between the first application logic entity and the second application logic entity to create a value array;

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obtaining a page designator for the second browser page; and

appending the value array containing the values for each data element to the page designator for the second browser page to form the browser page identifier.

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6. The method of claim 5 wherein the browser page identifier is a uniform resource locator that is dynamically generated via the steps of extracting, obtaining and appending and that contains the value of the data element shared by the first application logic entity and the second application logic entity.

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7. The method of claim 1 further including the step of:

detecting a navigation command to navigate to the second browser page; and

wherein the steps of generating and invoking are performed in response to the step of detecting the navigation command to navigate to the second browser page, such that the browser page identifier produced in response to the step of detecting the navigation command includes a value for the data element that is created by the first application logic entity and is passed to the second application logic entity via the browser page identifier.

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8. The method of claim 1 wherein:

the steps of generating and invoking are performed by a state sender logic entity;

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and

wherein the step of retrieving is performed by a state retrieval logic entity;

the state sender logic entity and state retrieval logic entity being logic entities incorporated into the first browser page and second browser page which interoperate to transfer values of data elements shared by the first application logic entity and the second application logic entity between the first browser page and the second browser page via  
5 incorporation of such values of data elements into browser page identifiers.

9. The method of claim 8 wherein:

the first application logic entity and the second application logic entity  
10 collectively form an application; and  
wherein the values of data elements shared by the first application logic entity and the second application logic entity collectively form state information that the state sender logic entity and the state retrieval logic entity can pass between the first browser page and second browser page via browser page identifiers for use by the application.

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10. A computer system comprising:

a processor;  
a memory system; and  
an interconnection mechanism coupling the processor and the memory system;  
20 wherein the memory system is encoded with a browser application that, when performed on the processor, provides a browser that causes the computer system to transfer information between logic entities in browser pages by performing the operations of:

defining a data element having a value for use by a first application logic entity in  
25 a first browser page in the memory system;

generating a browser page identifier for a second browser page in the memory system, the browser page identifier including the value for the data element;

invoking access to a second browser page using the browser page identifier, the second browser page including a second application logic entity in the memory system;

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retrieving the value of the data element from the browser page identifier for use by the second application logic entity in the memory system.

11. The computer system of claim 10 wherein when the browser performs the operation of defining a data element, the browser performs the operations of:

declaring, in the memory system, a data element for use by a first application logic entity in the first browser page; and  
providing a value for the data element in the memory system.

12. The computer system of claim 11, wherein when the browser performs the operation of providing a value for the data element, the browser performs the operation of:

retrieving the value for the data element from a browser page identifier identifying the first browser page.

13. The computer system of claim 12, wherein when the browser performs the operation of retrieving a value of the data element from a browser page identifier identifying the first browser page, the browser performs the operations of:

parsing the browser page identifier to retrieve a value for a data element from the browser page identifier in the memory system;

- assigning the value to the data element that corresponds to the value parsed from the browser page identifier in the memory system; and

repeating the operations of parsing and assigning for each value contained in the browser page identifier such that all data elements containing a value within the browser page identifier receive an assignment of their respective value parsed from the browser page identifier.

14. The computer system of claim 10 wherein when the browser performs the operation of generating a browser page identifier, the browser performs the operations of:

extracting a value for each data element shared between the first application logic entity and the second application logic entity to create a value array;

obtaining a page designator for the second browser page; and  
appending the value array containing the values for each data element to the page designator for the second browser page to form the browser page identifier.

5     15. The computer system of claim 14 wherein the browser page identifier is a uniform resource locator that is dynamically generated by the browser via the operations of extracting, obtaining and appending and that contains the value of the data element shared by the first application logic entity and the second application logic entity.

10    16. The computer system of claim 10 wherein the browser further causes the computer system to perform the operations of:

detecting a navigation command to navigate to the second browser page; and  
wherein the operations of generating and invoking are performed in response to the operation of detecting the navigation command to navigate to the second browser  
15    page, such that the browser page identifier produced in response to the operation of detecting the navigation command includes a value for the data element that is created by the first application logic entity and is passed to the second application logic entity via the browser page identifier.

20    17. The computer system of claim 10 wherein:

the operations of generating and invoking are performed by a state sender logic entity that operates within the browser as the browser operates on the processor; and  
wherein the operation of retrieving is performed by a state retrieval logic entity;  
the state sender logic entity and state retrieval logic entity being logic entities

25    incorporated into the first browser page and second browser page which interoperate to transfer values of data elements shared by the first application logic entity and the second application logic entity between the first browser page and the second browser page via incorporation of such values of data elements into browser page identifiers.

30    18. The computer system of claim 17 wherein:

the first application logic entity and the second application logic entity collectively form an application distributed across multiple browser pages; and

wherein the values of data elements shared by the first application logic entity and the second application logic entity collectively form state information that the state sender logic entity and the state retrieval logic entity, when performed within the browser, can pass between the first browser page and second browser page via browser page identifiers for use by the application.

19. A computer program product having a computer-readable medium including computer program logic encoded thereon for transferring information between logic entities in browser pages, such that the computer program logic, when performed on at least one processor within a computer system, causes the at least one processor to perform the operations of:

defining a data element having a value for use by a first application logic entity in a first browser page;

generating a browser page identifier for a second browser page, the browser page identifier including the value for the data element;

invoking access to a second browser page using the browser page identifier, the second browser page including a second application logic entity; and

retrieving the value of the data element from the browser page identifier for use by the second application logic entity.

20. A computer system comprising:

a processor;

a memory system; and

an interconnection mechanism coupling the input output interface, the processor and the memory system;

means for defining a data element in the memory system having a value for use by a first application logic entity in a first browser page in the memory system;

means for generating a browser page identifier in the memory system for a second browser page in the memory system, the browser page identifier including the value for the data element;

- 5 means for invoking access to a second browser page in the memory system using the browser page identifier, the second browser page including a second application logic entity in the memory system; and

means for retrieving the value of the data element from the browser page identifier for use by the second application logic entity in the memory system.